

WHAT IS CLAIMED IS:

1. A method of operating a display system in a vehicle for finding a suitable parking place, the method comprising:

recording an area of observation in the vicinity of the vehicle with at least one camera;

processing image data coming from the camera with an image processing unit;

5 displaying on a display screen in the interior of the vehicle the image data coming from the image processing unit as an image;

superimposing a parking place symbol, which symbolizes true to scale an area in the current image which the vehicle can reach when parking, starting from its current position, taking into account the properties of the vehicle, including the size of the vehicle and the maximum steering angle by the image processing unit onto the current image on the display screen.

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2. The method according to claim 1, wherein the parking place symbol is designed in the manner of a rectangular symbol.

3. The method according to claim 1, wherein the parking place symbol is designed in the manner of two paired rectangular symbols each with one transverse leg and one longitudinal leg.

4. The method according to claim 3, wherein the width of the rectangle or the length of the transverse legs corresponds approximately to the width of the vehicle on the scale of the

image representation.

5. The method according to claim 2, wherein the length of the rectangle or the distance between the opposing transverse legs corresponds approximately, based on the scale of the image representation, to the length of road necessary for parking without changing directions.

6. The method according to claim 3, wherein the length of the rectangle or the distance between the opposing transverse legs corresponds approximately, based on the scale of the image representation, to the length of road necessary for parking with maneuvering with two and/or four and/or six and/or eight and/or ten changes in direction.

7. The method according to claim 1, wherein the size of the superimposed parking place symbol and/or the arrangement of the superimposed parking place symbol in the image on the display screen can be altered by operating at least one operating element by the driver, in which case the change in size and/or change in position of the superimposed parking place symbol is converted to dimensions on the scale of the environment, taking into account the scale of the representation.

8. The method according to claim 1, wherein the image data of several cameras are mixed together in the image processing unit to generate a common image to be displayed on the display screen from the image data.

9. The method according to claim 1, wherein the observation area of the camera is located behind the trunk of the vehicle.

10. The method according to claim 1, wherein the camera is equipped with a wide-angle lens, whereby image distortion caused by the wide-angle lens is at least partially removed by processing the image data in the image processing unit.

11. The method according to claim 1, wherein the image data are processed in the image processing unit such that the image displayed on the display screen corresponds to a perspective outside the vehicle from a top view from above the vehicle.

12. The method according to claim 1, wherein different parking place symbols are stored in the image processing unit and are selected by the operator depending on a current parking situation and are superimposed on the image on the display screen.

13. The method according to claim 12, wherein different parking place symbols are stored for parking situations in parking parallel to the edge of the road on the driver's side and/or for parking situations in parking parallel to the edge of the road on the passenger's side and/or for parking situations in parking perpendicular to the edge of the road on the driver's side and/or for parking situations in parking perpendicular to the edge of the road on the passenger's side and/or for parking situations in parking obliquely to the edge of the road on the driver's side and/or for parking situations in parking obliquely to the edge of the road on the passenger's side.

14. The method according to claim 1, wherein at least one driving movement symbol in the form of a driving tube, is superimposed on the image, symbolizing an area in the image which the vehicle traverses in parking, starting from its current position, to reach the area symbolized by the parking place symbol, taking into account the properties of the vehicle, including the size of the vehicle and the maximum steering angle.

15. The method according to claim 1, wherein a vehicle position is specified as the starting point at a starting time, whereby the current image at the starting time is stored temporarily and is displayed permanently on the display screen as the temporarily stored image while the vehicle is moving further starting from the position at the starting time and whereby the movement of the vehicle is detected with a sensor system and is sent as movement data to the image processing unit, and whereby a vehicle symbol is superimposed on the temporarily stored image, the position of this symbol being calculated on the basis of the current movement data, and the current position of the vehicle being symbolized true to scale in the temporarily stored image.

16. The method according to claim 1, wherein at a starting time a vehicle position is defined as the starting point, whereby starting from the parking situation selected by the operator, steering instructions, in particular steering angle settings, are calculated automatically and announced to the driver, and these instructions must be followed in parking the vehicle starting from the current position in order to reach the area symbolized by the parking place symbol.

17. The method according to claim 16, wherein the steering instructions are calculated dynamically as a function of the current steering settings so that a when there are deviations between the steering instructions and the steering setting, appropriately corrected steering instructions are announced to the driver.

18. The method according to claim 16, wherein the currently required steering instructions are displayed visually for the driver during the parking operation as the set point steering angle symbol and/or they are announced acoustically and/or haptically as a set point steering angle signal.

19. The method according to claim 18, wherein the current actual steering angle is displayed visually for the driver in comparison with the current set point steering angle as the actual steering angle symbol during the parking operation.

20. The method according to claims 1, wherein the currently required steering angle setting is automatically set by a suitable actuation device for actuation of the vehicle steering system.